

AGREEMENT
BETWEEN
THE DEPARTMENT OF THE NAVY
AND
THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

USE OF NAVAL VESSELS CONTAINING POLYCHLORINATED BIPHENYLS
AS TARGETS AND TEST PLATFORMS RESULTING IN THEIR SINKING

**Agreement Between the Department of the Navy and
the United States Environmental Protection Agency
USE OF VESSELS CONTAINING POLYCHLORINATED BIPHENYLS
AS TARGETS AND TEST PLATFORMS RESULTING IN THEIR SINKING**

PARTIES

1. The United States Environmental Protection Agency ("EPA") and the Department of the Navy ("the Navy") are parties to this Agreement.

PURPOSE

2. This Agreement is intended to specify the manner in which the Navy is to proceed with certain activities the Navy has identified as vital to the national defense while the Navy conducts its sunken vessel study (a scientific, field study on the effect on the deep sea environment from a previous SINKEK). Based on currently available information, EPA believes the activity authorized by this Agreement is not likely to pose an unreasonable risk of injury to health or the environment. This Agreement does not eliminate legal requirements that may otherwise be applicable to SINKEK.

COVERED MATTERS

3. This Agreement establishes a plan for the Navy's limited resumption of the use of vessels, including vessels containing specified uses of polychlorinated biphenyls (PCBs), described in paragraph 4, as targets and test platforms in exercises that will result in their being sunk (SINKEKs), subject to the provisions of this Agreement. This Agreement is intended to be an interim agreement to allow a limited number of SINKEKs to proceed pending the resolution of the sunken vessel study and EPA's promulgation of a final rule on management and disposal of solid materials containing PCBs that includes provisions applicable to SINKEK.

4. This Agreement applies to the use of Naval vessels, including those containing PCBs in the following uses: (1) shipboard PCB-impregnated felt material, applications of which include, but are not limited to, gaskets in the joints of ventilation ducts, faying or insulating material between dissimilar metals on all ships, and machinery mount insulation; and (2) other incidental PCB uses, including uses as plasticizers or flame retardants in insulation, paints, adhesives, rubber mounts, non-metallic components of electrical wire cable systems, and other incidental PCB uses discovered during the term of this Agreement. If, during the term of this Agreement, the Navy discovers an additional significant use of PCBs, defined as more than 3 pounds of PCB per vessel, it shall inform the Director, Federal Facilities Enforcement Office (2261 A), U. S. Environmental Protection Agency, 401 M Street, S.W., Washington, D.C. 20460, who will determine, in consultation with the Navy, the extent, if any, to which the terms of the Agreement cover the newly discovered use.

DEFINITIONS

5. The following definitions apply to this Agreement:

- a. "SINKEX" means a SINKing EXercise, which is the use of a vessel as a target or test platform, is conducted to train personnel, test weapons or to study survivability of ship structures, and is conducted in a manner that will lead to the vessel's sinking.
- b. "felt" means wool felt material impregnated with PCBs;
- c. "inventory", as applied to vessels being used for SINKEX, means to take a reasonable sample from the types of equipment and locations the Navy and EPA have ascertained as potential locations of PCBs on Navy vessels;
- d. "reasonable sample" means a sample taken in accordance with Attachment 3 to this Agreement;
- e. "SINKEX vessel" includes, but is not limited to, destroyers, tenders, cutters, frigates, cruisers, tugs, and transports. "SINKEX vessel" does not include an aircraft carrier or a submarine.

STATEMENT OF FACTS

6. The Navy has provided the following information:

- a. In 1989, the Navy discovered that wool felt used as acoustical damping material on submarines and as gasket material on all vessels may contain viscous PCBs by weight at concentrations of 50 to 300,000 ppm. The felt material was procured from 1948 to the late 1970s under specifications that required a fire retardant and was used during both new construction and repair of vessels. The Navy promptly notified EPA of its discovery and removed the material from the Navy Supply System. Subsequent investigations by the Navy since 1990 have determined that solid PCBs are also present in some commercial items, such as paint, rubber mounts, rubber and plastic cable insulation, and tape, used on vessels. The cable insulation is specifically designed to be corrosion resistant for use in a salt air/salt water environment. These additional items have also been removed from the Navy Supply System. The Navy no longer uses either the felt or other PCB items in the repair or construction of new vessels. Many such items are in locations

accessible only by dismantling the vessel's structure, or moving equipment or machinery, which gives rise to safety and environmental risks. Many items are integral to maintaining the watertight and structural integrity of the vessel. Diminishing watertight and structural integrity of a vessel can diminish its training value as a target and make it worthless as a test platform.

- b. The Navy needs vessels to use as targets while conducting realistic weapons training for the crews of its vessels and aircraft. The Navy also needs vessel targets to test weapons and to test the survivability of hull structures when subjected to weapons. Some of this training and testing results in the vessel being damaged to the point that it sinks.
- c. Since October 16, 1990, most SINKEXs have been halted by the Navy. From 1990 to the present, vessels have been released for SINKEX when no on-board PCB concentrations were found to exceed levels regulated for disposal.
- d. The Navy conducted a modeling study in 1993 that predicted that PCBs introduced to the deep benthic environment have little chance of physical or biological transport to surface waters. Other Navy studies indicate that most of the PCBs introduced or to be introduced by the Navy through SINKEXs to the deep benthic environment are solid materials and not readily leachable.
- e. The Navy is currently undertaking a field study of the environmental effects from sunken naval vessels (Sunken Vessel Study) with an estimated final report date of June 1998.
- f. Ships used for SINKEX targets can be located on the ocean floor if required in the future. Undersea searches using modern search equipment such as precision bathymetry and side-scan sonar routinely find objects smaller than ships with only general information as to location, but this can take considerable time and effort because of the large area that must be searched. If the location where an aircraft or ship actually left the surface can be accurately determined, Navy experience has shown that the object will be found within several hundred yards of that location on the ocean floor. Thus given a precise location of the sinking, the Navy can locate sunken objects reliably and relatively quickly, especially large objects such as ships, even in deep water. Recent advances in navigation easily provide data more precise than necessary for

these purposes. The global positioning system (GPS) compares signals broadcast from a system of satellites to determine a position within a few yards. Even allowing for any differences caused because the GPS system is mounted on another ship or aircraft, use of GPS will provide the location where a target ship sinks that is accurate within 50 yards.

- g. The current suspension of SINKEX is increasingly impairing the Navy's ability to utilize seaborne targets for fleet readiness training and weapons systems development test and evaluation. Naval operational readiness requirements require the limited resumption of SINKEX before the conclusion of the Sunken Vessel Study.

REQUIREMENTS AND DELIVERABLES

7. The terms and conditions set forth in this Agreement are enforceable by the parties to it. This Agreement creates no private right of enforcement.

8.. The Navy shall not conduct any SINKEX during the term of this Agreement unless it has prepared the vessel in accordance with the requirements of this Agreement and all applicable permits administered by EPA.

9. Subject to the requirements listed below, the Navy may use for SINKEX up to 8 SINKEX vessels, from among those listed in Attachment I (or similarly-sized SINKEX vessels substituted if required to meet operational needs and provided that such substituted vessels are identified in the pre-SINKEX notification discussed in paragraph 16), during the duration of this Agreement.

10. Before engaging in a SINKEX, the Navy shall conduct an inventory of the SINKEX vessel to ascertain the presence of PCBs. Before sinking a SINKEX vessel, qualified personnel at a Navy or other approved facility shall:

- a. Remove all transformers and capacitors containing 3 lbs. or more of dielectric fluid.
- b. Use all reasonable efforts to remove any capacitors containing less than 3 lbs. of dielectric fluid from the vessel. Reasonable efforts include the removal of capacitors from electrical and control panels by using wire or bolt cutters or a screw driver.
- c. Drain and flush hydraulic equipment and heat transfer equipment.
- d. Remove all readily detachable items that deliberately or

unintentionally contain or have as a part of them any PCB or PCBs and that are capable of creating debris or contributing to chemical pollution.

- e. Dispose of all removed PCBs or items containing PCBs in accordance with the PCB regulations.

11. The Navy may leave in place wire cables, felt gaskets and other felt materials that are bonded in bolted flanges or mounted under heavy equipment, paints, adhesives, rubber mounts and gaskets and other objects in which the Navy has found PCBs (as listed in Attachment 4) unless such objects are readily detachable and their removal does not threaten the structural integrity of the vessel or impede the SINKEX. The Navy may determine such objects are not readily detachable if equipment must be disassembled or removed for access to the objects, if the objects must be removed by heat, chemical stripping, scraping, abrasive blasting or similar process, or if removal presents occupational safety and health concerns.

12. Before conducting any SINKEX under this Agreement, the Navy shall provide EPA with a table that identifies the estimated weight of PCBs in felt gaskets for each class of ship identified in Attachment 1, as already provided by the Navy for the GEARING and SPRUANCE class destroyers. If the Navy uses a vessel for SINKEX, other than from a class of vessel listed in Attachment 1, it shall provide the estimated weight of the PCBs in felt gaskets on that vessel with its pre-SINKEX notification, discussed in paragraph 16.

13. The Navy shall keep a record of its sampling for items containing PCBs for each SINKEX vessel sunk. This information shall be provided to EPA in the pre-SINKEX notification required at paragraph 16.

14. SINKEX vessels shall be sunk no closer than one mile away from each other and no closer than one mile away from the coordinates of previous SINKEX.

15. The Navy shall provide EPA with the coordinates of the SINKEX vessel on the ocean floor, accurate to within 500 yards. The Navy shall record the water depth at which the vessel is sunk as well as the water temperature at the depth at which the vessel is sunk.

16. Pre-SINKEX Notification: Prior to each SINKEX performed pursuant to this Agreement, the Navy shall provide written notification to the Director, Federal Facilities Enforcement Office, Office of Enforcement and Compliance Assurance, US EPA, of the following: a) the name of the SINKEX vessel, b) the vessel class, c) the vessel's tonnage, d) the location of the vessel, and e) that the Navy has conducted reasonable sampling of the vessel for PCBs, the data from which is attached to the

notification, and that the vessel has been prepared for SINKEX in accordance with the terms of this Agreement and all applicable permits administered by EPA. The notification shall be made by a Navy official of flag or equivalent rank responsible for preparing the vessel for SINKEX and shall be transmitted to EPA not less than 30 days before the SINKEX is conducted.

17. Post SINKEX Report: No later than 30 calendar days following each SINKEX, the Navy shall provide the Director, Federal Facilities Enforcement Office, Office of Enforcement and Compliance Assurance, US EPA, with a report. This report shall include: a) the name of the vessel used in the SINKEX; b) its approximate tonnage; c) the information, as described in paragraph 15, and date of its sinking; and d) a description of the efforts taken to clean the vessel prior to SINKEX and a listing of the items containing, or possibly containing, PCBs that were removed. EPA reserves the right to request additional or follow-up information. The Navy shall respond to follow-up information requests from EPA within 30 days of their receipt.

18. Cumulative Report: Thirty (30) days following the termination of the Agreement, the Navy shall prepare a report, covering the entire period of this Agreement, that sets forth the name and class of each vessel used as a target vessel, its approximate tonnage, and the location and date of its sinking. The Navy shall provide a copy of this report to the Director, Federal Facilities Enforcement Office, Office of Enforcement and Compliance Assurance, US EPA, and to the Director, Office of Wetlands, Oceans and Watersheds, Office of Water, US EPA.

19. In consultation with EPA, the Navy shall continue to evaluate the leaching of PCBs under environmental conditions similar to those expected at the SINKEX sites. The Navy shall continue to implement the sunken vessel study for deep water in consultation with EPA. The Navy shall continue to allow scientific EPA staff to serve as technical advisors in the development of the study objectives, the formulation of protocols and sampling strategy and the execution of the deep water sunken vessel study. At a minimum, quarterly conference calls between the Navy and EPA shall be initiated by the Navy to provide status updates. The Navy shall forward all sampling results within 10 working days of the Navy receiving them. The Navy shall provide funding, to the extent the Navy has already requested funding for this study and to the extent such funds continue to be appropriated and available, to develop and execute the study to EPA's reasonable satisfaction, including all reasonable expenses required to assist EPA in the involvement and execution of the study. EPA and the Navy shall consult on sampling results and on the final report of the sunken vessel study to determine any remaining concerns and any possible additional actions that may be taken by one or more of the parties to this Agreement.

ENFORCEABILITY AND RESERVATION OF RIGHTS

20. In the event of a material breach by the Navy of the terms and conditions of this Agreement, EPA shall notify the Navy and afford an opportunity to correct the problem. If, within sixty (60) days after such notice, EPA considers the material breach to remain, it may, at its sole discretion, terminate the Agreement. This Agreement may be terminated only by the signatories to the Agreement or their successors. Upon the termination of the Agreement, EPA reserves any rights granted to it under applicable law to seek administrative or judicial relief against the Navy in the form of, but not limited to, civil or criminal penalties, declaratory, injunctive, or other relief as necessary and appropriate. Nothing in this Agreement shall preclude any actions by EPA, after termination of this Agreement or exhaustion of the dispute resolution process in paragraphs 26 *et seq.*, to enforce the terms of this Agreement. Nothing in this Agreement shall preclude any actions by EPA to address or bring any available legal or equitable claims for any preexisting, current, or future violations or conditions concerning vessels and their PCB waste which are not specifically covered by this Agreement, or for any emergency condition or imminent hazard which may exist or arise or as a result of SINKEK of a vessel. The Navy shall provide written notification to the Director, Federal Facilities Enforcement Office, Office of Enforcement and Compliance Assurance, US EPA of any known or suspected breach of this Agreement within 5 days of the breach or suspected breach. Failure to do so may constitute a material breach of this Agreement.

FORCE MAJEURE

21. The Navy agrees to perform all requirements of this Agreement within the time limits established by this Agreement unless the performance is prevented or delayed by events which constitute a force majeure. A force majeure shall mean any event arising from causes not reasonably foreseeable and beyond the control of the Navy that results in a delay in, or prevents, the performance of any obligation under this Agreement despite the Navy's best efforts to fulfill such obligation. Force majeure includes, but is not limited to, acts of God; fire; war; insurrection; civil disobedience; explosion; unusual delays in transportation beyond the control of the Navy; restraint by court order or public authority; inability to obtain, at reasonable cost and after exercise of best efforts, any necessary authorizations, approvals, permits, or licenses due to action or inaction of any government agency or authority other than the Navy; and delays caused by compliance with applicable statutes or regulations governing contracting, procurement or acquisitions procedures, despite the exercise of reasonable diligence. The requirement that the Navy exercise "best efforts to fulfill such obligation" shall include, but not be limited to, best efforts to anticipate any potential force majeure event and address it before, during, and after its occurrence, such that any delay or prevention of performance is minimized to the greatest extent possible. A force majeure shall also include any strike or other labor dispute, whether or not within the

control of the parties affected hereby. A force majeure shall not include increased costs of activities covered by this Agreement, whether or not anticipated at the time such activities were initiated. In the event a force majeure occurs, the Navy shall notify EPA in writing in accordance with paragraph 23.

INSPECTION

22. Representatives of EPA and its regional offices shall have the right to inspect any vessels, docks, records, reports, data, compliance schedules, or other documents that are related to this Agreement or to any actions taken or obligations established under this Agreement which are kept by the Navy or on behalf of the Navy. Representatives of EPA, and its regional offices shall have access to the sites/vessels covered by this Agreement and may perform unannounced inspections.

EXTENSIONS

23. The Navy shall immediately notify the EPA Point of Contact (POC) verbally, and shall, within fourteen (14) days, notify the POC in writing whenever any event occurs which causes delay or the reasonable likelihood of delay in meeting any schedule for work to be performed pursuant to this Agreement (e.g., force majeure). EPA and Navy POCs are listed in Attachment 2. The Navy shall have the burden of showing that the delay was or will be caused by circumstances beyond the reasonable control of the Navy and could not have been or cannot be overcome by due diligence. The notification shall describe in detail the anticipated length of delay, the precise cause or causes of the delay, when and how the Navy became aware of the causes of the delay, the measures taken and to be taken to prevent or minimize the delay (or similar, future delays) and the alternative schedule by which the required action or actions will be completed. The time for performance hereunder shall be extended for a period equal to the delay resulting from such circumstances, unless the parties negotiate a different period. Within ten (10) days following receipt by EPA of written notice of a delay or anticipated delay, EPA shall confirm receipt of the notification and provide its concurrence or nonconcurrence with the alternative schedule proposed by the Navy, or it will suggest an alternate extension period. If EPA does not concur with the extension as proposed by the Navy, EPA shall provide a written explanation of the basis for nonconcurrence or the proposed alternate extension period.

24. Disputes concerning the need for an extension or regarding the duration of an extension shall be resolved pursuant to paragraphs 26 *et seq.*, Dispute Resolution.

AMENDMENTS AND MODIFICATIONS

25. In the event that amendments or modifications to this Agreement are necessary as a result of informal dispute resolution pursuant to paragraphs 26 *et seq.* of this Agreement, if amendments or modifications are required due to changes in applicable law or regulation, or if the parties mutually agree to amend or modify this Agreement, the affected provisions of this Agreement shall be renegotiated as necessary. All amendments and modifications to this Agreement shall be in writing and executed by EPA and the Navy. Disagreements in renegotiation shall be resolved pursuant to the Dispute Resolution provisions of this Agreement, paragraphs 26 *et seq.* During the pendency of any request for renegotiation, this Agreement shall remain in effect.

DISPUTE RESOLUTION

26. This section applies to disputes arising between the EPA and the Navy under this Agreement.

27. If EPA or the Navy disagrees with a decision or action of the other party, within ten (10) working days of the objectionable action or decision, the POC of the objecting party shall notify the POC of the other party. If the parties cannot resolve the dispute informally, within 10 working days of receiving the notification, EPA or the Navy may pursue the matter formally by placing objections in writing.

- a. The Navy's written objections will be directed to the Director, Federal Facilities Enforcement Office, HQ EPA. EPA's written objections shall be directed to the Deputy Assistant Secretary of the Navy (Environment and Safety). This written notice shall be mailed within 10 working days after conclusion of the informal dispute resolution process. The written objections shall identify specific points of the dispute, any basis for its position, and a proposed resolution.
- b. EPA and the Navy shall have fifteen (15) working days from receipt of the written objections to attempt to resolve the dispute through formal negotiations. EPA and the Navy agree to confer in person or by telephone to resolve the dispute as long as any request for a conference will not exceed the formal negotiation period. EPA or the Navy shall provide a written decision to the objecting party within 20 working days of receipt of the written objections.

28. If the written decision does not resolve the issue to the satisfaction of the objecting party, the Deputy Assistant Secretary of the Navy (Environment and Safety)

or the Director, Federal Facilities Enforcement Office, HQ EPA (the "Director") may request, in writing, to confer about the dispute within 20 working days of receipt of the written decision. The Director and the Deputy Assistant Secretary shall have ten (10) working days, from receipt of the request for a conference, to resolve the dispute. The request for a conference shall enumerate the specific points of the dispute, the basis for the position, and the proposed resolution.

29. No later than 20 working days after the Director and the Deputy Assistant Secretary confer, the Director shall provide the Deputy Assistant Secretary a written decision resolving the dispute. The unresolved dispute tolls the effect of any decision until the Navy receives the Director's written decision finally resolving the dispute. The Navy reserves its right to seek resolution under authorities outside this Agreement.

30. EPA and the Navy shall use their best efforts and act in good faith to resolve disputes arising under this Agreement informally and expeditiously. Each specific dispute will be resolved at the lowest possible level of authority. Normally this resolution will occur between the POC's for EPA and the Navy. In addition, during the pendency of any dispute, the Navy agrees that it shall continue to implement those portions of this Agreement which are not in dispute and which can be reasonably implemented pending final resolution of the issue(s) in dispute.

31. If EPA determines that all or part of those portions of this Agreement which are affected by the dispute should stop during the pendency of the dispute and so notifies the Navy in writing, the Navy shall discontinue implementing those portions of the Agreement. EPA and the Navy agree that the procedures contained in this section are the sole procedures for resolving disputes arising under this Agreement, subject, however, to paragraph 23 of this Agreement. If any party fails to follow any of the requirements contained in this section, that party shall have waived its right to further consideration of the disputed issue.

TERMINATION

32. This Agreement shall terminate on the Navy's 8th SINKEX performed pursuant to this Agreement. EPA and the Navy may agree to extend this Agreement at that time. EPA may terminate this Agreement at any time, upon cause, in writing from the EPA signatory to the Agreement, or his successor, to the Navy signatory to the Agreement, or his successor.

COMPUTATION OF TIME

33. Unless otherwise specified in this document, all time periods delineated are to be computed from the date this Agreement is signed by all parties to this Agreement. All time periods are to be calculated as calendar days, not working days,

unless otherwise specified. However, if a submittal, document, deadline, or other obligation under this Agreement falls due on a weekend or federal holiday, it will be due and deemed timely if submitted on the next business day following the weekend or holiday on which it fell due. A document is deemed submitted when it is placed into the U.S. Mail, certified, return receipt requested.

BINDING EFFECT

34. This Agreement shall apply to and be binding upon EPA and its regional offices, the Navy, and all officers, directors, agents, trustees, servants, employees, successors or assigns of the named parties, as well as upon all persons, firms and other legally cognizable entities in active concert or participation with the named parties. This Agreement does not bind non-parties and shall not impact the Navy's existing or future obligations to any non-parties.

SEVERABILITY

35. If any provision or authority of this Agreement or the application of this Agreement to any party or circumstance is held by any judicial or administrative authority to be invalid, the application of such provisions to other Parties or circumstances and the remainder of the Agreement shall remain in force and shall not be affected thereby.

EFFECTIVE DATE

36. This Agreement shall become effective upon execution by authorized representatives of EPA and the Navy. This is the entire agreement between the parties with respect to the issues raised in paragraphs 1 - 35 above. All prior conversations, meetings, discussions, drafts, and writings of any kind are specifically superseded by this Agreement and may not be used by the parties to vary or contest the terms of this Agreement, or as evidence of the parties' intent on entering into this Agreement. The Navy shall sign and date this Agreement followed by EPA. This Agreement is final and effective on the date EPA signs after the Navy affixes its signature to the Agreement.

THE PARTIES SO AGREE:



8/19/96 Date

Steven A. Herman
Assistant Administrator
for Enforcement and Compliance Assurance
U.S. Environmental Protection Agency



8/16/96 Date

Robert B. Pirie, Jr.
Assistant Secretary of the Navy
for Installations and Environment
Department of the Navy

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ATTACHMENT 1

List Of SINKEX Vessels

During the effective period of this Agreement, the following vessels (or similarly-sized alternates to suit operational requirements) shall be utilized in SINKEX subject to the terms and conditions of this Agreement:

East Coast

APA GAGE, Ft. Eustis, VA
AFT 91 SENECA, Annapolis, MD
DD 763 WILLIAM C. LAWE, Ft. Eustis, VA
WLB 390, BLACKHAW, Ft. Eustis, VA
WMEC 153, CHILULA, Roosevelt Roads, PR

West Coast

ATA 178 TUNICA, Pearl Harbor
DD 566 STODDARD, Suisun Bay, CA
DD 685 PICKING, Mare Island
DD 740 TOLMAN, Mare Island
DD 743 SOUTHERLAND, Mare Island
DD 950 RICHARD S EDWARDS, Suisun Bay, CA

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ATTACHMENT 2

Points Of Contact

FOR US EPA:

Diane Lynne
Federal Facilities Enforcement Office
Office of Enforcement and Compliance Assurance
USEPA, 401 M St., SW, Washington, D.C. 20460
MAILCODE: 2261 A
phone: 202-564-2587
fax: 202-501-0069

FOR DEPARTMENT OF THE NAVY:

Paul Yaroschak
Office of the Assistant Secretary of the Navy (Installations and Environment)
Department of the Navy
1000 Navy Pentagon
Washington, D.C. 20350-1000
phone: 703/614-1282
fax: 703/695-2573

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ATTACHMENT 3

Requirements for Sampling of Sinkex Vessels
for Polychlorinated Biphenyls

1. Surveys of vessels for PCB materials are to consist of the following samplings. These requirements are identical to those previously contained in NAVSEA ltr Ser PMS330D4/1370 of 4 Dec 92. For small vessels, some of the potential PCB items listed below may not be on board, or there may be insufficient quantity of such items to provide the number of samples listed. If listed items are not on board, the PCB survey report shall include a note to that effect. Sampling shall not be duplicative of the source material (i.e., multiple samples of the same cable, same bulkhead insulation within a compartment, same oil source, etc. is not required). Types of materials not listed below shall not be sampled. Surface wipe samples shall not be taken.
2. The sampling listed below is intended to be non-destructive. Sampling methods which destroy the functionality of the item being sampled (i.e., cross cutting of electrical cables and dismantling of sealed components) are permitted on stricken surface ships when it is known that the vessel will not be used for continued operation (i.e., the intended recipient's use of the vessel is for static display or artificial reef).
3. Samples are to be collected in accordance with local procedures. The Norfolk Naval Shipyard (NNSY) has prepared a suitable procedure which is used during NNSY sampling of inactive vessels in Naval Inactive Ships Maintenance Facilities (NISMF).
4. The following samples shall be taken:
 - a. 20 samples of electrical cables, consisting of a slice from the outer rubber/plastic insulation. Avoid sampling cables having visible oil contamination on the surface. Samples should be from various cable types/sizes distributed throughout the vessel. Sixteen of the 20 should be shielded cables, if available.
 - b. 10 samples of ventilation duct flange gaskets, taken randomly throughout the vessel. Identify whether the gasket material is wool felt, rubber or composite material.

- c. 5 samples of hydraulic, lube and fuel oils and 5 samples of grease, taken randomly throughout the vessel.
- d. 5 samples of different rubber applications, taken randomly throughout the vessel. Samples may be isolation shock mounts for electronic equipment, pipe hanger liners, electrical channel rubber, foundation mounts, pipe block hangers and/or other rubber applications (except vent gaskets).
- e. 5 samples of double-backed adhesive tapes, taken randomly through the vessel. These are commonly used to mount compartment check-off list holders to bulkheads or for label plates.
- f. 5 samples of aluminized paint from boiler casings, steam safety valves, uptake spaces and other high temperature systems and piping.
- g. 5 samples of bulkhead insulation, taken randomly throughout the vessel, consisting of 2X2 inch square or circular plugs down to the bulkhead surface. The insulation material shall be analyzed separately from the lagging cover.

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ATTACHMENT 4

Objects on Navy Vessels That May Have PCBs

Cable insulation
Rubber gaskets
Felt gaskets
Thermal insulation material
- fiberglass
- felt
- foam
- cork
Adhesives
Tapes
Surface contamination of machinery and other solid surfaces (unknown sources)
Oil-based paint
Caulking
Rubber isolation mounts
Foundation mounts
Pipe hangers
Light ballasts
Any plasticizers
Paints